

ESM Table 1. *Characteristics of the cohorts for the study of the mRNA (A) and protein (B) expression.*

A.	Normoweight	Obesity	T2DM
N	17	43	11
Age (yr) [mean (SD)]	53.88 ± 15.41	57.23 ± 14.08	66.09 ± 8.58
Sex (N, Female)	12	25	5
BMI (kg/m ²) [median (IQR)]	23.81 (1.50)	27.99 (4.60)***	28.68 (3.53)***
HOMA-IR [median (IQR)]	0.82 (1.41)	1.22 (1.20)	3.66 (21.95)*
Glucose (mM) [median (IQR)]	4.74 (0.80)	5.53 (0.64)	8.33 (3.11)***
Insulin (μIU/mL) [median (IQR)]	3.57 (5.55)	4.49 (4.20)	10.23 (17.96)
Triacylglycerol (mM) [median (IQR)]	1.04 (0.87)	1.03 (0.76)	1.66 (1.08)
NEFA (mM) [mean (SD)]	1.00 ± 0.75	0.77 ± 0.26	0.92 ± 0.41
Glycerol (mM) [median (IQR)]	177.6 (239.1)	144.3 (132.4)	301.6 (255.8)*
B.	Normoweight	Obesity	T2DM
N	9	10	9
Age (yr) [mean (SD)]	51.67 ± 3.24	52.70 ± 4.24	55.22 ± 4.84
BMI (kg/m ²) [median (IQR)]	23.30 (3.91)	33.48 (5.32)***	35.22 (6.17)***
HOMA-IR [median (IQR)]	0.63 (1.38)	2.21 (3.08)	6.92 (7.30)**
Glucose (mM) [median (IQR)]	3.78 (1.11)	4.28 (1.67)	8.56 (4.82)**
Insulin (μIU/mL) [median (IQR)]	4.00 (5.03)	12.70 (12.21)	18.73 (12.32)**
Triacylglycerol (mM) [median (IQR)]	0.81 (0.82)	1.43 (1.25)	1.72 (1.60)*

Abdominal adipose tissue (AT) was extracted from a cohort of 71 and 28 subjects for the gene (A) and protein (B) expression analysis, respectively. Participants were grouped by BMI and type 2 diabetes (T2D). Clinical and anthropometrical variables were collected. Normal distributed data are expressed as mean value (SD), and for variables with no Gaussian distribution, values are expressed as median (interquartile range, IQR). *p<0.05, **p<0.01, ***p<0.001, compared with normoweight. ANOVA, Kruskal-Wallis and Pearson χ^2 tests.